# **Goose Fencing a Success!**



# The background...

On several occasions, during the heat of the summer, many visitors to Lake Cochituate in Cochituate State Park (Natick) and Mauserts Pond in Clarksburg State Forest (Clarksburg) were disappointed to find that the beaches were closed for swimming. All public swim beaches in Massachusetts conduct routine bacteria tests to ensure public safety, and at Department of Conservation and Recreation (DCR) facilities, water samples are collected weekly and tested for Enterococci. These bacteria are used to indicate the potential presence of harmful microbes. If the level of Enterococci exceeds 61 colonies per sample, then the swimming beach is forced to remain closed until a follow up test passes. There are several potential sources of bacteria in a water body, including failing septic systems, agricultural runoff, pet waste and abundant waterfowl. In response to the repeated beach closures, the DCR Lakes and Ponds staff conducted an investigation and determined that the high bacteria counts occurring at these locations were primarily due to the large populations of Canada Geese (Branta canadensis). Since geese are attracted to areas near water where they can come on shore to graze, the lawns near the beaches are ideal feeding areas. Unfortunately, each goose can produce a pound of feces daily, either deposited directly into the water, or washed off the grass and beach and into the water when it rains. To prevent further beach closings, DCR staff worked to develop methods to keep the Canada Geese off of the park's beaches and lawns.

### The theory...

Geese are very particular. They do not like to travel though vegetation that is greater than the height of their chest, or fly over obstacles such as low fences to reach grazing areas. Geese are vulnerable when moving through tall vegetation, since they can not see a predator approaching. The young goslings do not develop their flight feathers until later in the summer and are unable to fly or jump over fences. Therefore, the installation of a low barrier (wood fence or row of dense bushes) between the water and grass area prevents the geese from coming on shore to graze and encourages them to seek alternative feeding areas.

# The projects...

Work began at Mauserts Pond this spring with the construction of a bench-barrier between the beach and the lawn. On either side of the beach area, rows of native shrubs were planted to create a natural goose barrier. Temporary fencing was added as an extra measure until the new shrubs become well established. The benefits of the bench fence are two-fold. Patrons enjoy relaxing on the benches, and the geese are unable to pass the bench to reach the lawn beyond.

At Cochituate State Park a low fence of natural wood and wire screen has been placed between the beach and lawn. In addition to preventing geese from reaching the lawn to graze, the crowds of geese on the beach were reduced, enabling the life guards to focus their attention on the swimmers.

Both the fence at Cochituate and the bench-barrier at Mauserts have several built-in gates, to provide visitors with easy access between the beach and lawn.





#### Success!

Since the installation of goose barriers at the two beaches there have been no more bacteriarelated testing failures at these swim beaches.

#### How can you help?

Over the years, some populations of Canada Geese which used to migrate seasonally have now become year-round residents. There are several reasons that some populations of geese no longer migrate, including warmer winters and a continual source of food from humans. Many people enjoy feeding the geese and other waterfowl when they visit the park, yet unfortunately, despite their good intentions, they are not doing these animals a favor. The geese and other waterfowl often become dependent on humans for food, and most of the treats given to the geese constitute "avian junk food" and do not provide a nutritious or balanced diet. The waterfowl may loose their natural fear of humans and occasionally become aggressive as they learn to expect food. Furthermore, as geese become concentrated in public areas, such as swim beaches, they contribute bacteria to the water body, often causing bacteria tests to fail and beaches to close. Rather than feed the geese (or any wildlife), it is better to simply admire them while the forage naturally for food and raise their young.



Department of Conservation and Recreation Lakes and Ponds Program 2004